Remarks

Claims 1, 3-8, and 11-18 are pending in the application. The Examiner is thanked for his thorough review and detailed remarks responsive to the Applicants' previous Response (mailed December 21, 2007). In accordance with the Examiner's helpful comments, the Applicants have amended independent Claims 1, 13, and 16 to better clarify the feature "treatment", and in so doing, has not added any new matter. Support for the amendments may be found, for example, at paragraph [0026] of the specification. Entry of the foregoing claim amendments into the Official Records is respectfully requested.

The Applicants also note with appreciation that on pages 2-4 of the instant Office Action (mailed 2/4/08), the Examiner indicates that certain distinguishing features relied upon by the Applicants are not present in the claims. The Applicants respectfully disagree and provide details pointing to the exact locations of these features in the claims.

On page 2 of the instant Office Action, the Examiner asserts that the claims fail to recite the feature of "content being inserted into the screens is transmitted with the broadcast program." The Examiner then goes on to assert that Chernock does in fact display content downloaded to the STB (Set Top Box), and that Chernock is therefore not limited to displaying pre-stored information, as previously argued by the Applicants. In support of his assertion, the Examiner cites col. 3, line 64-col. 4, line 3 of Chernock as disclosing "news and sports information is inserted into programs being displayed on the television", and since news and sports information would not be pre-installed on a STB, this information must be downloaded from an external source.

First, the Applicants respectfully direct the Examiner to Claim 1, which is directed generally to a process for transmitting a digital televised broadcast comprising an *interactive application*. This interactive application comprises *elemental components* (which themselves comprise different image

screens). Next, the Examiner is respectfully directed to line 10 of Claim 1, which recites: "transmitting said *elemental components* in a data structure..." (emphasis added). From the foregoing, the Applicants submit that the feature of transmitting elemental components together with a digital broadcast program is recited in Claim 1.

Next, the Applicants respectfully direct the Examiner to lines 19-21 of Claim 1, which recites:

> "constructing an animated image by superimposition of an animated image background corresponding to a principal broadcast and an *image grouping together at least part of the elemental components*..." (emphasis added).

The above feature indicates that the elemental components (which comprise image screens) are superimposed or inserted into the principal broadcast. Since these elemental components were also transmitted with the principal broadcast, the Applicants respectfully submit that the feature of "content being inserted into the screens is transmitted with the broadcast program" is indeed recited in Claim 1.

The Applicants now address the Examiner's assertion that the above feature is also disclosed by Chernock. As noted above, col. 3, line 64-col. 4, line 3 of Chernock was cited as disclosing "news and sports information is inserted into programs being displayed on the television", and since news and sports information would not be pre-installed on a STB, this information must be downloaded from an external source. The Applicants respectfully submit that the Examiner has incorrectly interpreted Chernock insofar as Chernock does not disclose inserting new and sports information into a broadcast program. Instead, Chernock discloses inserting pre-stored data (which is not transmitted with the original video stream) into news and sports video broadcasts. To be sure, the Applicants provide the pertinent text of Chernock:

"The control information may also be added in real time to a live presentation in

progress, by specifying video "holes" to the STB. The STB will use this information to display text associated with the program, e.g., news or a sports program, and broadcast along with the video and audio. The choice of text for display can be based on personalization information already stored in the STB." [col. 3, line 64-col. 4, line 4 of Chernock]

From the foregoing, it is clear that Chernock is describing the ability to display text associated with a *program,* and that the program itself may be news or sports program. Indeed, Chernock makes it clear that the text for display is "already stored in the STB." Thus, unlike Claim 1, Chernock does not disclose transmitting content to be inserted into a broadcast with that program. To the contrary, Chernock explicitly describes inserting pre-stored data onto a live broadcast.

Turning now to page 3 of the instant Office Action, the Examiner asserts that the claims of the present Application fail to recite the following features: "the details of the 'application' being transmitted, and how the 'application' differs from the objects disclosed by Chernock" (see Office Action, pg. 3, first para.); and "the details of the structure [of the application]..." (see Office Action, pg. 3, second para.). By way of background, the Applicants re-assert the following distinctions between Chernock and subject of the present claims:

> Chernock fails to disclose an ***application*** that is superimposed on a principal video program. The structure of an application, such as that described in this application, is far more complex than the simple audio or video ***objects*** added to the principal program in Chernock. In sharp contract to Chernock, this application describes the transmission of an entire data structure that provides a complete interactive application. Chernock, to the contrary, simply describes superimposing previously stored data objects into a principal program. As noted above, these data objects are not transmitted with the principal program, but are instead previously stored in a STB.
>
> Use of the data structure described by Claim 1 provides important and unique advantages. This novel data structure, which includes INITIALIZATIONS, DRAWS, PALETTES, and SCREENS, makes it possible to repetitively recompile data while preparing the interactive application for viewing (see para. [0006] of the Specification). [see pg. 2, lines 4-15 of the Applicants' Response mailed 12/21/07].

Turning now to the claims, the Examiner is respectfully directed to Claim 1 at lines 1-2 which recites "transmission of a digital televised broadcast comprising an *interactive application*" (emphasis

added). From the foregoing, the Applicants submit that the "application being transmitted" is indeed recited in Claim 1. This interactive application is made of *elemental components* comprising different image screens between which a view can navigate (see lines 3-5 of Claim 1). The elemental components (and thus, the interactive applications) are transmitted "in a *data structure* that groups the elements in different classes", wherein the components comprise ""INITIALIZATIONS" defining positioning in a data structure of other components, components of "DRAWS" corresponding to graphic representations...components of "PALETTES" corresponding to color palettes and components of "SCREENS" corresponding to screen image descriptions..." (see lines 10-18 of Claim 1).

In view of the foregoing, the Applicants respectfully submit that Claim 1 indeed recites transmitting an entire interactive application in a data structure which is far more complex than the simple audio or video objects. Claim 1 also explicitly recites that the elemental components of this interactive application may be superimposed into the principal broadcast program. As previously noted, these elemental components (by way of a data structure) are transmitted with the principal broadcast program. Nothing in Chernock discloses or suggests that elements of its broadcast may be inserted into the broadcast program. To the contrary, only pre-stored data (stored on the STB) may be inserted into its broadcast program. Therefore, the Applicants submit that the differences between the "application" of Claim 1 and the objects of Chernock are clearly recited in Claim 1.

Further, the particular details of the data structure are also recited in Claim 1. As noted above, the data structure of Claim 1 groups the various elemental components according to classes which include positioning data ("INITIALIZATIONS"), graphical data ("DRAWS"), color palettes ("PALETTES") and image description data ("SCREENS"). Inherent to this data structure is a grouping feature that segregates the various data types according to a particular processing

requirement. In other words, the data structure groups positioning data together because this data has particular processing requirements. Similarly, image data is grouped separately according to its processing requirements, and so on. Thus, the Applicants respectfully submit that the details of its data structure is explicitly recited in Claim 1. Further, the Applicants re-assert that nothing in Chernock discloses or suggests providing a data structure that groups certain elemental components for transmission with a digital broadcast signal.

Turning now to the page 3 of the instant Office Action, third paragraph, the Examiner asserts that the claims fail to recite the "details of the structure of the INITIALIZATIONS and DRAWS." By way of background, the Applicants re-assert the following remarks:

> Another feature described in this application, but not in Chernock, is that the INITIALIZATIONS define the positioning of elements in the data structure used for the transmission of the interactive application. During the construction of a final animated image, the INITIALIZATIONS are used to determine the position in the data structure of DRAWS belonging to the screen image to be displayed. Once located, the DRAWS are retrieved and displayed. This method of retrieving components and constructing an image is closely linked to the data structure. Chernock does not describe or suggest such a structure or its equivalent. Lacking any suggestion of a data structure containing INITIALIZATIONS and DRAWS, Chernock also fails to suggest the construction of an image by identifying DRAWS based on the INITIALIZATIONS, and retrieving the same from the data structure. [see pg. 2, line 20-pg. 3, line 6 of the Applicants' Response mailed 12/21/07].

Turning now to Claim 1, the Applicants recite: ""INITIALIZATIONS" defining positioning in a data structure of other components"; ""DRAWS" corresponding to graphic representations materialized in the structure in the form of codes calling up native functions of a host language of a digital terminal," (see lines 12-15 of Claim 1). Images of elemental components are created by "interpreting the components of "INITIALIZATIONS" to determine the position in the data structure of the components of "DRAWS" belonging to the screen image to be displayed..." In view of the forgoing, the Applicants submit that Claim 1 indeed recites the specific details of the structure of the INITIALIZATION and DRAWS components.

Turning now to page 4 of the instant Office Action, the Examiner asserts that the details of "treatment" [by a digital terminal] as defined in the specification are not recited in the claims. As noted above, the Applicants have amended independent Claim 1 to further clarify the details of "treatment". Specifically, with regard to the claims were amended to recite that the elemental components [of the interactive application] are grouped into different classes according to the processing requirements particular to each of said classes. Prior to the foregoing amendment, Claim 1 recited grouping elemental components according to the *treatment* the elemental components required by the digital terminal. The Applicants submit that now, in view of the foregoing amendment, the details of "treatment" are recited in Claim 1.

Further, as previously argued by the Applicants, Chernock does not disclose, and the Examiner agrees, associating a series of stimuli and actions to enable navigation between screen images, and grouping said elemental components in different classes according to "treatment" the elemental components require by said digital terminal (i.e., processing requirements particular to the classes), the elemental components within each class requiring common processing by said digital terminal.

Nonetheless, LaRocca is cited as disclosing these features. LaRocca, however, fails to disclose a grouping elemental components in different classes according to *processing requirements of the elemental components*, wherein the elemental components within each class requiring common processing by said digital terminal.

Indeed, as shown in Figure 9 and discussed in col. 16, lines 29-32 of LaRocca, the interactive data 906A-C each comprise data specific to a type of subscriber terminal 1212 (emphasis added). The data includes objects 1302 and control information 1304. As LaRocca explains, the objects 1302 correspond to buttons, list boxes, animations and the like (col. 16, lines 33-34), and the control information 1304 corresponds to the behavior of the objects 1302 (column 16, lines 55-56).

According to LaRocca, the objects 1302 may vary depending on the type of subscriber terminal (column 16, lines 38-39), which means for instance that a type A subscriber terminal 906A contains all objects 1302 which are *adapted to the specifications of this type of subscriber*, for instance in terms of number of bits per pixels.

The elemental components according to the present Application, in sharp contrast, are grouped according to their *particular processing requirements*, without regard to the type of terminal that will do the processing.

Thus, in view of the foregoing, the Applicants respectfully submit that LaRocca fails to disclose or suggest grouping elemental components according to *processing requirements* of the elemental components by said digital terminal, wherein the elemental components within each class requiring common processing by said digital terminal.

Turning now to the instant Office Action, the Applicants acknowledge the rejection of Claims 1, 4, 11, 12, 14, 16, 17, and 18 under 35 U.S.C. 103(a) as being unpatentable over Chernock in view of LaRocca. The Applicants also acknowledge the rejection of Claims 3, 5, 6, 7, and 8 as being unpatentable over Chernock in view of LaRocca, and in further view of Kamanda. The Applicants re-assert all previous arguments presented in Applicants' Response dated 12/21/07, and submits that all distinctions asserted above (and previously asserted) are now clearly recited in the claims (as amended) of the present Application, and as a result, said distinctions must be considered for purposes of examining the Applicants' claims.

Further, for at least those reasons discussed above (and in Applicants' prior Response (12/21/07), the Applicants submit that Claim 1, and Claims 3-8 and 11-18 which recite similar features, are fully patentable over any theoretical combination of Chernock, LaRocca, and Kamanda. Reconsideration and withdraw of all grounds of rejection is respectfully requested.

In view of the foregoing, the Applicants submit that the entire application is now in condition for allowance, which notice is earnestly solicited. If, during his review, the Examiner believes a discussion with the Applicants' representative would be helpful in advancing this case, the Examiner is invited to contact the undersigned at his convenience.

Respectfully submitted,

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